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IN THE CLAIMS:

1. (Currently Amended) A programming station for generating an automation ~~Automation application program programming station~~ designed to be executed in automation equipment, ~~characterised in that it has~~ and written in at least one graphic automation language, said programming station comprising an internal memory in which it stores atfor storing a plurality of least one grammar file (402) files all written in a same, hierarchical and object oriented language in text format, containing each said grammar file comprising a description grammar for automation applications, for at least one of the graphic automation languages (ladder, SFC, FBD) using describing a respective graphic automation language for generating an automation program a single, hierarchised and object oriented language.

2. (Currently Amended) ~~Programming~~ The programming station according to claim 1, characterised in that the wherein said internal memory also contains a set of one or several is for storing at least one application description files (401)file , each said description file describing part of the an automation

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application and being expressed written in the single, ~~hierarchised~~ hierarchical and object oriented language.

3. (Currently Amended) ~~Programming~~ The programming station according to claim 2, ~~characterised in that wherein~~ the single, ~~hierarchised~~ hierarchical and object oriented language is the XML (eXtended Markup Language) language.

4. (Currently Amended) ~~Programming~~ The programming station according to claim 2, ~~characterised in that all wherein~~ said at least one application description files ~~(401) contain~~ file comprises an application program description file, an application input-output description file, and an application data description file.

5. (Currently Amended) ~~Programming~~ The programming station according to claim 2, ~~characterised in that a wherein:~~

said grammar file comprises a Ladder language description program, (LD_Source.*) describes an application in Ladder language wherein at least one application element of an application

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is described as an object comprising at least one attribute comprising at least one of defining the different elements of the ladder language as objects, each of these elements containing attributes either in the form of objects, parameters, variables or and texts, and forming information stored in

the internal memory is for storing information having of the programming station and that can be represented in the form of a tree structure.

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6. (Currently Amended) Programming ~~The programming~~ station according to claim 5, ~~characterised in that the various wherein application elements of written according to the Ladder language include program comprise~~ a contact, a horizontal link, a vertical link, a coil, a short circuit, an empty cell, a function block call, ~~an FFB~~ a flexible function block expression, a comparison block and an arithmetical operations block.

7. (Currently Amended) The programming ~~Programming~~ station according to claim 2, ~~characterised in that a further comprising:~~
a programming station display means;

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a table of rows and columns of data for displaying a graph of an object to be displayed by the programming station display means; and

a position object for defining graphic coordinates of a position of said object to be displayed, wherein

said grammar file (SFC_Source.*) describes comprises a Sequential Function Charts language description program for describing an application in the Sequential Function ChartsSFC language, wherein by defining the different at least one application elementelements of the SFC language,an application is described as an object comprising any of namely a step, a transition element, a jump, a link between graphs, and a comment, as objects, and the graphic coordinates of the different jump, step or transition type elements being defined by a position type object defining the coordinates of the position of the corresponding object in the table of rows and columns on which the graph of the object is displayed on the programming station display means.

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8. (Currently Amended) ~~Programming~~ The programming station according to claim 2, ~~characterised in that a~~ wherein said grammar file (FBD Source.*) describes comprises a function block language description program for describing an application in the FBD function block description language, wherein at least one application element of an application is described as an object in the function block description language ~~using the different elements of the FBD language as objects.~~

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9. (Currently Amended) ~~Programming~~ The programming station according to claim 8, ~~characterised in that~~ wherein the different elements in the FBD language include at least one application element comprises any of function blocks, text boxes, links between blocks, jump instructions, labels and comments.

10. (Currently Amended) ~~Programming~~ The programming station according to claim 1, ~~characterised in that it comprises~~ comprising an XML Extended Markup Language handler Hndlr (20) stored in non-volatile memory, dialoguing through said handler for sending and receiving notifications firstly with a management

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module of a decision tree structure management module (30) model
representative of the an automation application expressed in the
single, ~~hierarchised~~ hierarchical and object oriented language,
and also with a plurality of database managers (~~Mng1, Mng2, ...~~),
each manager being specific to part of the an automation
application stored in one of the databases (~~Db1, Db2, ...~~).

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11. (Currently Amended) ~~Automation~~ An automation equipment
~~capable of~~ for generating ~~executing~~ an automation application
program, ~~characterised in that it comprises~~ comprising memory
~~means to store~~ for storing a set of ~~one or several~~ a plurality of
automation application description files ~~(401)~~ expressed in a
single same, ~~hierarchised~~ hierarchical and object oriented
language, the automation equipment also comprising translation
~~means to convert~~ for converting each application description files
file into a binary language that can be executed by the automation
equipment.

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12. (Currently Amended) ~~Automation~~ The automation equipment according to claim 11, ~~characterised in that~~ wherein the single, ~~hierarchised~~ hierarchical and object oriented language is the XML (eXtended Markup Language) language.

13. (Currently Amended) ~~Automation~~ The automation equipment according to claim 12 ~~characterised in that~~ wherein the set of application description files contains an application program description file, an application input-output description file, and an application data description file.

14. (Currently Amended) ~~Automation~~ The automation equipment according to claim 12, ~~characterised in that the description files respect one of the grammars for translation~~ further comprising a grammar file storing a description grammar, said description grammar for translation of at least one of the application description files from one or more at least one graphic automation languages language into the XML language.

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15. (Currently Amended) ~~Automation~~ The automation equipment according to claim 14, ~~characterised in that the automation equipment comprises~~ further comprising means of for checking that the description of the an application written in the XML language satisfies the a description grammar of the graphic automation language used by the automation equipment, ~~as a function of which graphic automation language is used.~~

16. (Currently Amended) ~~Automation~~ The automation equipment according to claim 14, ~~characterised in that~~ wherein the graphic automation language used by the automation equipment includes one or more languages at least one language among the Ladder language, the SFC language and the FBD language.